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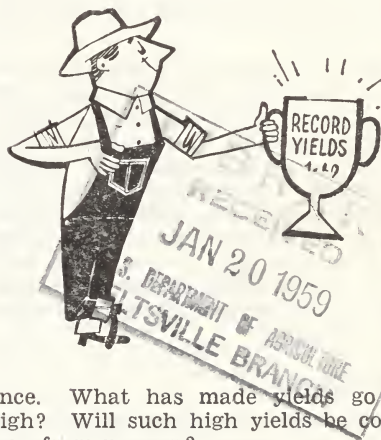
WHAT'S BEHIND RECORD YIELDS?

Last year brought the highest average crop yield per acre ever reached in the United States. This achievement could be just another high point in a continuing upward trend or it could be a peak that juts above the surrounding years.

The yield upsurge in 1958 shows a surprising gain above the new high levels of recent years. Yields per acre, all crops considered, have increased markedly since the early 1950's. In 1958, average yield per acre for all crops was 43 percent larger than the average of the fair to excellent years 1947 through 1949.

This means that 57 acres of the land harvested last year gave as much food, feed, and fiber as 100 acres yielded no longer than 10 years ago. Land not chosen for cultivation can be given conservation rests or devoted to grazing, forests, recreation areas, or other uses. Such cropland shifts have not offset mounting yields per acre. Crop production totals have grown fairly consistently during the past 10 years, and in 1958 surpass the previous record years—1957, 1956, and 1948—by more than a tenth.

Farmers thinking ahead to marketing problems and farm prices in coming years have good reason for keen interest in the outstanding 1958 perform-



ance. What has made yields go so high? Will such high yields be common from now on?

Many factors must work together to attain high yields. The retirement of poorer land from cultivation is one obviously important factor that has raised yield averages. This year's gain over 1957 cannot be explained by this factor to any large extent since harvested acreage increased slightly in 1958. Farmers are constantly changing their practices in many phases of land and crop management. They well know that high yields often bring lower costs per bushel or other production unit. Good farmers also appear to get a huge "kick" from outdoing former best yields of either their own fields or their neighbors'.

Very few progressive farmers would say that they put into practice everything there is to be known about f

tilizer, irrigation, pest control or improved varieties. Because of constant improvement in farm methods it would seem that we might expect a fairly regular uptrend in crop yields. Such increases, as farmers well know, are not delivered on a regular schedule. Weather often makes more difference than several other factors combined.

Commonsense, of course, rules out expecting ideal weather to consistently favor each crop throughout the Nation. Too much or too little rain, heat, or wind hits some section or some crop almost every week of the growing season. Weather that aids one crop may harm another, right on the same farm. The new-mown hay calls for clear, sunny weather while the cornfield and the pasture beg for rain. Upland crops thrive from rains that flood the bottomlands.

But some years are definitely better than others for more crops and over wider areas. Review of the past season shows some main phases important to crops in which weather was mainly favorable. The outstanding characteristic probably was widespread abundance of moisture which stimulated plant growth and enabled more land than usual to cash in on improved practices that would have been less effective in a dry year.

Great Plains

Let's look at the Great Plains country as an example. Many millions of acres there got a good late-summer soaking which gave fall wheat seeded for 1958 an excellent start. Snows gave winter protection, and spring and summer rains helped plants grow and fill heads with plump grain. Rust damage was unusually light. Harvest was completed with only small losses, despite threats and some lodging caused by heavy winds. Development of sorghum grain, hay, and other crops was simi-

larly favored. This winning weather cycle could be repeated for 1959, but it seems more likely that 1958 may stand out for some time as the best Great Plains crop year.

The North Central States had a good season with little of the searing heat and drought which sometimes shrivels small grains and hinders corn pollination and growth. Throughout much of the Nation, cool weather helped small grains fill to heavy test weights. Hay crops and pastures kept growing through much of the summer with the vim of early spring, aiding livestock operations on most farms. Western valleys had ample irrigation throughout the season.

East and South

The crop season in the East and in the South was generally favorable despite some difficulties in planting early crops.

The outcome of farmers planning, skill, and chance taking for 1958 crops was new high record national yield averages for corn, wheat, oats, soybeans, barley, rye, sorghum grain and silage, rice, cotton, hay, peanuts, potatoes, sweet potatoes, and tobacco. This group includes the acreage heavyweights of American agriculture and represents all but about 4 percent of 1958 harvested field crop acreage. This marks a further rise in the farming efficiency which allows 1 farmworker to feed himself and at least 23 others, more than twice as many people as in the 1940's.

With present population increase running at the rate of an addition equal to a California every 4 years, this demonstration of productive power carries assurance of adequate future food supplies.

Harold C. Phillips
Agricultural Estimates Division, AMS

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Rising consumer income is supporting a strong demand for food. Higher levels of income and employment are likely in the months ahead.

Livestock

Hog slaughter will be substantially above a year earlier as soon as animals from the sharply increased fall crop begin coming to market. Prices to farmers will slide, and by spring are likely to be considerably below a year earlier.

Market supplies of fed cattle this winter are expected to be slightly larger than last winter. Numbers of cattle on feed January 1 are expected to be up from last year. Slaughter weights are likely to continue heavy. Prices are likely to decline during the period of heavy marketings this winter, with heavy animals discounted considerably. Slaughter of grass cattle will continue relatively small the next several months.

Seasonal rise in lamb prices this winter may be less than usual. The number on feed is higher than in any of the last 3 years. Larger supplies of fed cattle also will offer increased competition to lambs.

Eggs

In the next couple of months, egg production is likely to run 5 to 7 percent above last year. More layers are on farms and, in line with the long-time trend, production per layer is likely to be at a new high. Prices to farmers are expected to average well below a year earlier.

Broilers

In late December, broiler supplies were running close to 15 percent above a year ago. By the end of February, the increase is likely to be closer to 20 percent. Increased production probably means lower prices than in early 1957.

Soybeans

About 375 million bushels of the 1958 soybean crop are expected to be crushed

in 1958-59. About 90 million bushels are expected to be exported. The total is about 24 million more than last year. Adding in feed and seed uses, disappearance will fall short of the supply by about 100 million bushels. Such a carryover would be 79 million bushels more than on October 1, 1958.

Feed

The demand for feed is strong as increasing livestock and poultry productions boost feed requirements.

Corn will not be under acreage restrictions next year as a result of the vote for the new program in the November 25 referendum. Price support under the new program will be based on 90 percent of the average price received by producers for the 3 preceding calendar years, but not less than 65 percent of parity. National average support price for the 1959 crop is estimated at around \$1.12 to \$1.15 a bushel.

Citrus

The December 1 estimate of total orange and tangerine production for 1958-59 was for a 14-percent increase over the freeze reduced crop of 1957-58. Demand for fresh use and for processing is strong, but prices during the first half of 1959 are likely to average below the same period of 1958 when they rose rapidly.

Potatoes

A winter crop 16 percent smaller than in 1958 was forecast as of December 1. Early spring producers plan a 19-percent smaller acreage than in 1958. But supplies from the 1958 late fall crop will continue large for several months and prices to producers are likely to remain well below a year earlier.

Tobacco

The national acreage allotment for flue-cured tobacco is the same as for 1958. Most individual farm allotments are unchanged.

HOW BIG ARE OUR FEED GRAIN STOCKS?

Stocks of feed grains—corn, oats, barley, and sorghum grain—have mounted steadily during the past 6 years, increasing on an average of 6.5 million tons a year. Record production in 1958 is expected to cause an even sharper increase in feed grain carryover at the close of 1958–59. Carryover into 1959–60 will probably be around 75 million tons, some 16 million tons more than last year. This would be nearly 4 times the 20 million tons carried over in 1952.

These big stocks may be considered in three parts: (1) Essential working stocks—to meet processing and feeding needs before the new crop becomes available; (2) desirable reserve stocks to meet emergency needs, and (3) surplus stocks.

Just how much of these big stocks are surplus and how much are needed reserve cannot be immediately determined. It will depend on the level of feed grain production and the demand in the years ahead.

Whether we have large or small feed grain crops during the next few years, these big stocks are now the most significant single factor in the outlook for feed. From one angle they present a major disposal problem.

However, for the first time in history we are in a position to weather a drought as severe as any of the past 50 years without experiencing a period of livestock liquidation, reduced supplies of livestock food products, and sharply higher feed and livestock prices.

Comparisons

The chart on the next page shows how these stocks measure up to an annual year's production and to various outlets for feed.

In these comparisons, allowance is made for what might be considered a normal carryover. The stocks above "normal" stocks may be considered as available for use without reducing carryover to an undesirably low level.

For the purpose of these comparisons, the "normal" carryover is taken

as 20 million tons. This would include an allowance for carryover of corn designated in the Agricultural Act of 1954 as 15 percent of normal domestic consumption and exports—or currently around 500 million bushels.

The carryover allowance for the other grains is taken at about the 1950–54 average—oats, 250 million bushels; barley, 75 million bushels; and sorghum grain, 25 million bushels. The carryover of around 75 million tons in prospect for 1959–60 would be 55 million tons above this allowance for "normal" carryover.

Drought Deficit

These above-"normal" carryover stocks of 55 million tons would be 43 percent of the 1953–57 average production of 129 million tons. They would be sufficient to fully make up for the deficit of a very unfavorable season such as 1936 or 1947 and still leave at least a normal carryover at the close of the year.

In the severe drought year 1936, feed grain production was 38 percent below the 1929–33 average. With our present production practices, recurrence of a drought like 1936 probably would not cut production as much as the 38 percent that occurred in that year. But even if such a reduction occurred, it would mean a drop from the 1953–57 average of 129 million tons to 80 million tons.

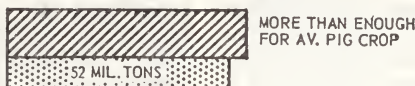
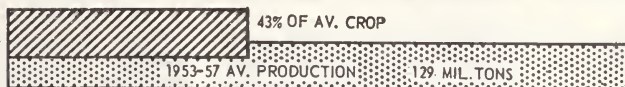
To maintain feed grain utilization at the level of recent years (around 130 million tons), 50 million tons would be drawn from our big carryover stocks.

In 1947, production was 20 percent below the 1942–46 average. The deficit resulting from such a crop would take only about half of the 55 million tons above "normal" stocks.

With the big stocks now on hand, a severe drought would not be expected to be accompanied by the sharply rising feed prices, the greatly reduced feeding, the smaller livestock production, and the higher livestock prices that characterized the 1934–36 period and the 1947–48 season.

SIZE OF FEED GRAIN CARRYOVER

ESTIMATED
CARRY OVER
JNTQ 1959-60,
75 MIL. TONS



* ADJUSTED TO CURRENT LEVEL OF PRODUCTION AND UTILIZATION

U. S. DEPARTMENT OF AGRICULTURE

NEG. 6566-58 (10) AGRICULTURAL MARKETING SERVICE

Pig Crop Requirements

The 55 million tons of feed grains above "normal" stocks would be a little more than the 52 million tons of feed required to produce our combined spring and fall pig crops of recent years. The 55 million tons would take care of about 40 percent of the total annual feed concentrates required by all livestock and poultry, or meet total livestock requirements for about 5 months of the feeding year.

Exports

Although increased exports have proved an outlet for substantial quantities of our surplus feed grains, they have been a relatively minor outlet, compared with the total tonnage now on hand.

Carryover stocks above the normal level are nearly 6 times the record exports of 10 million tons for 1957-58.

Malcolm Clough
Agricultural Economics Division, AMS

NEW REPORT ON POTATOES

A report on the utilization of potatoes, the first of its kind, was published in 1958 by the Crop Reporting Board. The report, covering the 1956 and 1957 crops, was inaugurated in order to give growers a picture of the relative importance of the various marketing outlets and to provide a basis for an appraisal of the utilization of current supplies.

The report, to be published annually, includes information on the quantities sold for table stock and for each of the important processing uses; namely, chips and shoestrings, dehydration, frozen french fries, other frozen products, canned potatoes, other canned products, starch and flour. It also shows quantities sold for livestock feed and seed. A story developed from information on the report appears on page 7.

HOW ANNUAL CATTLE COUNT IS MADE

Many of you have already done your job up to the current cattle count. Now it's up to the statisticians to analyze the facts you sent in—about 160,000 of you fill out and return postcard-type questionnaires every year to help us estimate the number of cattle on farms and ranches. This means that about 1 out of every 20 livestock producers reports on his operation. You can look for the Department's report on the cattle count next month—February 13.

The annual cattle count, dating back almost a century, is aimed at giving everyone the most accurate estimate possible of cattle on the Nation's farms and ranches each January 1.

Questionnaire

About the first of December, a postcard-type questionnaire goes out to a sample of farmers. Rural mail carriers and star route operators leave the questionnaires in mailboxes of farmers along their route that they feel are representative of the entire route. Some questionnaires are mailed directly to farmers.

Experience has shown that reports from a cross section of farmers and ranchers give accurate indications of the year-to-year change in cattle numbers.

Other sources are tapped to help come up with accurate estimates of cattle on farms and ranches. During the year, surveys are made to get information on calf births, cattle and calf deaths, and farm and commercial slaughter. Supplemental information is gathered on railroad and truck shipments, market receipts, and on inshipments from veterinary inspection records.

The current estimates are checked later with other information, and revised if necessary.

A complete enumeration of cattle is made every 5 years by the Bureau of Census. The Census count provides basic benchmarks for the annual estimates.

The information collected from farmers and ranchers is processed in 41 USDA statistical field offices. In most States there is a cooperative program with the State Department of Agriculture or the College of Agriculture. The field offices distribute the questionnaires. After a survey card is returned by a producer, it is checked, summarized, and placed with other cards representing a cross section of producers in the State.

The State statistician, who is a USDA employee, is familiar with cattle production in the area. He travels widely over the State, visiting livestock markets and producers. Information he gets by personal contacts helps greatly in analyzing and interpreting survey results. When the survey cards are summarized, computations are made and the State statistician arrives at an estimate of the cattle on farms in his State. He then forwards the figures to the Crop Reporting Board in Washington, D. C.

In Washington, the recommendations from the field office are reviewed. Statisticians from at least five field offices are called in to help the Board with this review.

Security

During preparation of the material in the field offices and during reviews in Washington, strict security measures are followed to prevent any leak of information. After the estimates have been released at the exact appointed time in Washington, State offices are responsible for disseminating the information.

Although the statisticians in the field offices and Washington play vital roles in the cattle count, the accuracy and usefulness of the count rests squarely upon the shoulders of farmers and ranchers who report on cattle numbers.

R. M. Pallesen
Agricultural Estimates Division, AMS

PROCESSORS ARE BIG USERS OF POTATOES

Processing of potatoes has become a large industrial enterprise. The Crop Reporting Board says that over 41 million cwt.—about 1 out of every 6 sacks—from the 1957 crop were used to make various potato products. Potato chips and shoestring potatoes made up about 42 percent of the processed potatoes in 1957, or about 1 out of every 13 bags produced.

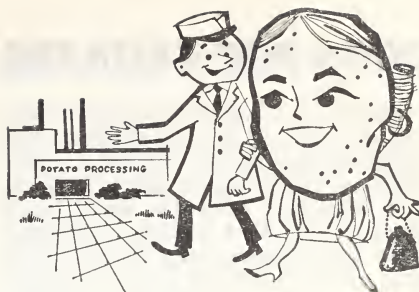
In 1957, 17 percent more potatoes were used for potato chips and shoestrings than in 1956. More potatoes were also used for dehydrated potatoes; canned potatoes; canned products, such as hash, stew, and soup; and for frozen products, other than frozen french fries. The quantity used for starch and flour was about a third less than in 1956, and quantities used for frozen french fries were also below 1956.

Most processors of chips and shoestrings are located in or near large consumer centers. Transportation and merchandising of the products figure in the location of these plants. Chippers are interested in potatoes producing a good quality product. Considerable research is being conducted to produce a potato that will meet the needs of chippers. Storage, particularly of the fall crop, is a problem.

Generally chippers obtain potatoes from Florida in the early spring, and as other areas come into production, the volume of new potatoes used increases materially.

Most starch and flour plants are located in the heavy fall producing areas. Maine and Idaho have the largest number of plants. Other plants are located in Colorado, Washington, North Dakota, and Minnesota. Starch and flour plants are large users of diverted and low quality potatoes.

Plants that produce frozen french fries are located in many parts of the country, but the bulk of the production is centered in Idaho and Maine. Idaho leads in producing dehydrated potatoes. A few plants in other States produce dehydrated potatoes too. Plants pro-



ducing canned potatoes and other canned products such as hash, stew, and soup are primarily located in the Eastern, Midwestern, and Pacific States.

The volume of potatoes used for processing varies from year to year. Generally, and based on industry figures, the volume of potatoes used for manufacturing chips, shoestrings, frozen french fries, and dehydrated potatoes has been on the increase. Some of the new dehydrated products have shown a relatively large increase in a matter of a few years. The volume going into the making of starch and flour varies from year to year, depending on the quality and size of the crop.

Processing of potatoes is here to stay, and increases in the uses of potatoes for making potato products can be expected.

Oakley M. Frost
Agricultural Estimates Division, AMS

POTATOES PROCESSED ¹

Product	Million Cwt.
Chips and Shoestrings-----	17.4
Starch and Flour-----	12.7
Frozen French Fries-----	4.2
Dehydrated-----	3.8
Other ² -----	3.2

Total Processed-----	41.3
Total 1957 Production-----	239.5

¹ 1957 data.

² Canned potatoes, and other canned and frozen products.

EGGS FOR BROILERS

Owners of flocks that supply hatching eggs play an important part in the billion-dollar broiler industry. This industry now provides American families with over three-fourths of their chicken. In 1958, flock owners supplied hatcherymen with about 2½ billion broiler-hatching eggs. Although small compared with market-egg production, this number represented 4 percent of all eggs produced in the United States the past year.

Producing hatching eggs and table eggs have much in common, but there are some differences. For example, hatching-egg producers enjoy a price for their overall output that averages considerably higher than that of market-egg producers. But one shouldn't jump to the conclusion that hatching-egg producers necessarily make more money—hatching eggs cost more to produce. Each producer must decide for himself whether it will be more profitable to produce hatching eggs or table eggs.

The expense of buying and keeping cockerels is one reason it costs more to turn out each dozen fertile eggs. Day-old cockerels of the most popular broiler lines cost \$1 to \$2 apiece, and one is needed for every 10 to 15 pullets. In many cases the hatcheryman supplies cockerels to the flock owner at no cost, but there is still the cost of the cockerel's upkeep—feed, house space, and care. Also, mortality is usually a bit higher in mixed flocks.

Pullorum Test

The owner of a hatchery supply flock also has another added expense. His birds must be blood tested for pullorum disease. This test identifies birds that might be carriers of the disease. Birds that react to the test are eliminated from the flock. The blood-testing requirement came about as part of a joint Federal-State plan to improve poultry production.

The National Poultry Improvement Plan has been so successful that today after 23 years of operation, only about 3 birds in every 10,000 tested show signs

of pullorum. Under the plan, official State agencies usually perform the pullorum testing for the egg producers. Cost for this service varies from State to State, ranging from no charge in Florida to a maximum of 6 cents per bird in large flocks in some other States.

Poultrymen keep their broiler-type layers in production a relatively short time—7 to 9 months on the average. Compare this with market-egg birds that are often kept in production as long as 2 years. Since the productive life of a broiler-type layer is short, the typical hatching-egg producer starts two flocks a year. This practice tends to even out the demand for replacement chicks.

Sales

Pullet chick sales by 10 primary breeders of broiler replacement stock illustrate this evenness of demand. In 1958 these breeders made roughly 55 percent of their annual sales of chicks for broiler hatchery supply flocks in the first 6 months of the year. Replacements for market-egg flocks tell an entirely different story. About 85 percent of the annual hatchings of market-egg-type chicks occurred in the first half of 1958.

Broiler hatching egg production responds much more rapidly to price than does market egg production. Producers can quickly step up or cut back output simply by keeping their layers in production for a longer or shorter period. In addition, hatcherymen utilize the existing supply more efficiently, when eggs are scarce.

The relationship between hatching egg prices and the cost of production largely determines how long the producer will keep his flock. If the relationship is unusually favorable, he may hold on to his layers for more than 9 months. On the other hand, an extremely unfavorable relationship may force him to sell in less than seven.

The egg producer must consider other things, too. He might need to

sell part of his flock to make room for replacement stock, or he might want to take advantage of especially favorable fowl prices. Sometimes he is forced to sell birds when he loses all or part of his market for hatching eggs. This is a risk that the hatching egg producer must take.

When it comes to quality, the hatcheryman and the housewife have entirely different ideas. The quality-conscious housewife likes wholesome eggs that are uniform in color, and eggs with firm whites that do not spread all over the frying pan when broken out. Hatcherymen prefer normally shaped eggs with smooth, strong shell texture that weigh between 23 and 26 ounces a dozen because eggs that meet such standards usually hatch best. But, the hatcheryman is most interested in the genetic makeup of the birds that produce his hatching eggs. He wants eggs from strains and crosses that will produce hardy chicks with rapid growth and good fleshing characteristics—chicks that will make money for the grower.

Hatchability

The hatchability of eggs is related to the maturity of the flock. If we follow the production pattern for a typical flock, we can see the effect of age on the quality of hatching eggs. The flock is usually blood tested when the birds are about 5 months of age and are in about 25 to 35 percent production. At this time most of the eggs are not yet up to acceptable size. As the rate of lay quickly rises to a peak, egg size and hatchability also become most favorable.

Egg size continues to increase after peak production is reached, the number of eggs with poor shell quality increases, and hatchability drops off. In the early part of the laying cycle, eggs are rejected because they have poor shell texture or are too small; later they are rejected because they have poor shell texture or are too large. Under average conditions roughly one-fourth of the eggs produced by broiler hatching egg flocks do not go into incubators. Most of these find their way to market egg channels.

Herman Bluestone
Agricultural Economics Division, AMS

DID YOU KNOW?

Your crop and livestock reporting service is always looking for better ways to provide you with information that will help you in planning your planting, breeding, feeding, and marketing from month to month. In 1958, a number of steps were taken to improve crop and livestock reporting.

The quarterly cattle-on-feed reports have been expanded to include 8 more States, bringing the total to 21. The January report will use information gathered under the expanded program.

Special tabulations were made in a number of States to obtain a more precise count of hog farms to be used in connection with pig crop reports. Steps were taken to speed up the date of revision of pig crop estimates where necessary, by issuing such revisions in connection with quarterly reports.

Beginning in January 1958, for the first time weekly weather-crop bulletins were prepared and issued by the State statistician in all States during the crop growing season, and on a year-round basis where the service is desired locally.

A revised law made it possible for the first time to show in the July 1 cotton report the cotton acreage actually planted, and from this information to estimate acreage for harvest in an August 1 report, instead of a month later. Before, the July 1 cotton report showed "the acreage in cultivation."

A program to improve egg production estimates was started in 7 States. This expanded program is aimed at getting more complete data on commercial flocks and developing more precise estimating techniques.

Plans were made to establish monthly milk production reports in some of the 13 States not yet making such reports.

The horticultural specialties program was enlarged from the pilot stage to cover 10 of the more important States producing floral and nursery products.

Work continued during the year on developing new and improved sampling techniques for reports.

PRODUCTION OF MILK PER COW CONTINUES TO CLIMB

The rapid increase in total milk production in the United States during the 1950's was the result of the rise in output per cow. The number of cows has declined each year since 1944, except in 1953.

Production per cow in 1958 averaged a new high—in the neighborhood of 6,380 pounds per animal. This is a gain of 39 percent since 1944. Production passed the 5,000-pound level in 1947, and the 6,000-pound level in 1956, based on averages for the country as a whole.

A rather surprising development in these advances is that, as production per cow reaches higher levels, the rate it goes up from year to year apparently is increasing rather than decreasing.

Comparing averages for several recent 5-year periods with the 5-year average preceding shows the following percentage increases: For 1935-39, the increase was 2.4 percent above 1930-34; for 1940-44, 5.7 percent above 1935-39; for 1945-49, 7.4 percent above 1940-44; for 1950-54, 8.9 percent above 1945-49; and for 1955-58, 11.2 percent above 1950-54.

Explanations

There are two main explanations for the increase in rate of production per animal. In general, the producing ability of cows has been increased through the selection of better producing strains, and the feeding of greater amounts of feed concentrates and improved qualities of roughages.

The second explanation is statistical. A number of farms which have ceased to keep milk cows have been those with very few cows—which were kept only as a sideline to other major farm enterprises. In many cases these cows were not high producing nor did they receive as good care and feed as cows in larger herds. The number of farms keeping

milk cows has declined at least 4 percent a year for the past 8 to 10 years.

The increase in milk production per animal does not indicate an increase in efficiency in terms of feed used. It appears that there has been no change in the past decade in the amount of total feed nutrients used per 100 pounds of milk produced for the United States as a whole.

The amount of feed concentrates required to produce 100 pounds of milk has been practically constant at about 30 pounds. The additional nutrients supplied through roughages have just been enough to provide the balance of the increased nutrient needs for milk production, and for satisfying the feed intake requirements of a larger animal.

High Producing Cows

High producing animals lead to increases in overall efficiencies. Per 100 pounds of milk, feed requirements may remain constant, but requirements for labor and other costs tend to decline as production per animal increases.

The financial advantage of keeping cows with high production averages is shown in the chart. For the 1956-57 testing year, a cow producing 9,894 pounds of milk, DHIA average for that year, netted the owner approximately 2½ times the amount that a cow producing 6,100 pounds, U. S. average, returned to the owner.

A cow producing 14,000 pounds of milk netted the owner about twice what cows producing 9,894 pounds, the DHIA average, would return.

In 1957, the average for all cows was 6,162 pounds. The State averages ranged from 2,930 pounds for Louisiana to 8,880 for California. In the past 15 years all States have made progress in raising the average per cow. But the States with high averages at the beginning of the period have increased as rapidly as those in the lower range.

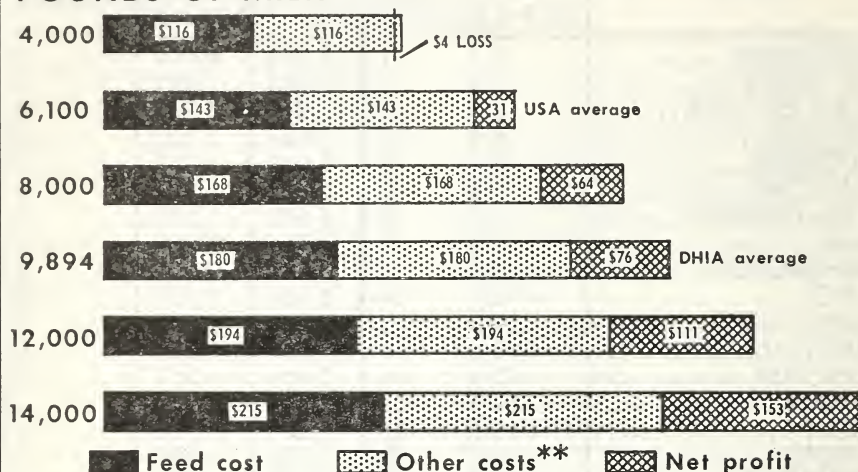
AVERAGE MILK PRODUCTION PER COW

STATE	RANK		POUNDS PER COW		PERCENT INCREASE*
	1955-57	1940-44	1940-44	1955-57	
CALIFORNIA.....	1	1	6,934	8,650	25
NEW JERSEY.....	2	2	6,624	7,887	19
RHODE ISLAND.....	3	3	6,362	7,803	23
ARIZONA.....	4	15	5,364	7,633	42
WISCONSIN.....	5	5	6,010	7,393	23
NEW YORK.....	6	8	5,856	7,277	24
MASSACHUSETTS.....	7	6	5,974	7,230	21
UTAH.....	8	9	5,810	7,160	23
WASHINGTON.....	9	4	6,084	7,100	17
IDAHO.....	10	10	5,736	7,057	23
CONNECTICUT.....	11	7	5,884	7,043	20
PENNSYLVANIA.....	12	13	5,460	6,823	25
MICHIGAN.....	13	14	5,414	6,817	26
INDIANA.....	14	27	4,448	6,776	52
OHIO.....	15	25	4,684	6,760	44
ILLINOIS.....	16	20	4,938	6,693	36
MINNESOTA.....	17	17	5,120	6,690	31
MARYLAND.....	18	22	4,766	6,463	36
NEVADA.....	19	11	5,700	6,397	12
NEW HAMPSHIRE.....	20	18	5,036	6,253	24
VERMONT.....	21	16	5,254	6,250	19
MAINE.....	22	19	5,020	6,217	24
IOWA.....	23	21	4,802	6,197	29
OREGON.....	24	12	5,598	6,150	10
COLORADO.....	25	23	4,742	6,013	27
DELAWARE.....	26	28	4,446	5,950	34
NEBRASKA.....	27	29	4,404	5,447	24
WYOMING.....	28	26	4,556	5,330	17
MONTANA.....	29	24	4,716	5,307	12
VIRGINIA.....	30	35	3,784	5,267	39
FLORIDA.....	31	37	3,630	5,173	42
KANSAS.....	32	31	4,152	5,160	24
NORTH DAKOTA.....	33	30	4,204	4,973	18
MISSOURI.....	34	34	3,812	4,863	28
NORTH CAROLINA....	35	33	3,954	4,843	22
NEW MEXICO.....	36	32	4,018	4,743	18
SOUTH DAKOTA.....	37	36	3,766	4,697	25
KENTUCKY.....	38	38	3,588	4,407	23
WEST VIRGINIA.....	39	41	3,510	4,380	25
OKLAHOMA.....	40	42	3,336	4,313	29
SOUTH CAROLINA....	41	39	3,560	4,113	16
TEXAS.....	42	45	3,156	3,980	26
GEORGIA.....	43	44	3,196	3,963	24
TENNESSEE.....	44	40	3,520	3,947	12
ARKANSAS.....	45	46	3,030	3,630	20
ALABAMA.....	46	43	3,236	3,477	7
MISSISSIPPI.....	47	47	2,532	2,973	17
LOUISIANA.....	48	48	2,292	2,800	22

*1955-57 over 1940-44.

GOOD COWS PAY MORE

POUNDS OF MILK*



U. S. DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

The ranking of the States in terms of the average production per cow differs somewhat now from what it did 15 years ago, but most of those in the top 10, 15 years ago are still there today. Similarly, there has been little change in the ranking of the lower end of the production scale.

Increased productivity of dairy animals is not confined to the United States. Every important dairy producing country in the world has shown an increase in production per animal except those countries adversely affected during World War II. A number of these countries have averages well above the United States—one or two occasionally exceed the California average.

Rate of Increase

It is quite significant that the rate of increase has not diminished in any instance. The U. S. average production of milk per animal probably can be expected to continue to increase at least as rapidly as in recent years. It is not likely that the rate of increase will outstrip that of the past decade or so, at least until the average reaches a much higher level than now prevails.

Recent rates of progress in production per cow, the incentives for achieving these increases, and the methods used in attaining them are helpful in appraising prospects for future trends in milk production.

The demand for milk in the United States can be met for a number of years without any increase in the number of milk cows kept by farmers. In fact, some continued decrease in milk cow numbers could occur without any reduction in the per capita supply of milk products.

Herbert Kriesel
Agricultural Economics Division, AMS

EDITOR'S NOTE:

The editor welcomes letters from readers of *Agricultural Situation*. Your ideas and comments help make it serve your needs better. So don't hesitate to write to—The *Agricultural Situation*, AMS, USDA, Washington 25, D. C.

"Bert" Newell's

Letter

I do have the worst time getting used to some things. Just take some of these so-called "contemporary" houses. I never thought that there was anything particularly beautiful about a chickenhouse with a shed roof and all open in front. They were cheap to build and you could put one up pretty fast.

Well, sir, the other day my wife and I went to see a house, the price was out of this world, and honestly, it looked to me just like a glorified chickenhouse. The front was all plate glass and the rooms in back had little windows so high up you'd have to stand on a chair to see out.

Then there are some of the new cars. For several years we have had fins, and it took me a long time to get used to them. But now, they are getting wings and it's even harder to tell whether they're going or coming.

I heard tell about a fellow who couldn't get his car started. When he opened the hood he found that the kids got mixed up and put the luggage in the wrong end. I guess it won't be long until the blamed things will actually fly.

Well, I guess it's all progress and we do have to remember that it wasn't so long ago that we thought we were doing pretty good to go from the Atlantic to the Pacific in 2 days and 3 nights. This has had an effect on our agricultural reporting service too.

Everything moves faster. The area of competition has changed and is changing. The kind of reports and information that fit the bill even 15 or 20 years ago don't meet present-day needs. It really keeps us humping to try to keep up, to say nothing of trying to keep a little ahead of the needs.

Not so very long ago a report once a month on some of the major field crops was about the most important thing.

Then transportation speeded up and more items were added. Next, refrigerator cars got into the act and competition on perishables spread out, and with it a pressing demand for information on these crops.

Now we find that a lot of people say they need information on more items, weekly reports, estimates by counties, and much, much faster service.

Just to show you how some people feel about time, a news reporter complained to me that he had to waste 5 seconds in turning over a face sheet on the monthly report so that he could get to the actual figures. Isn't that something? He was serious too.

Well, it all goes to show that the job we are doing is really important. We are always trying to improve the reports and you folks are doing a fine job in providing the basic material. Your promptness in getting your replies in is a big help in meeting our tight time schedule.

It's going to take a bit of doing to speed up and still provide all the things needed to keep up with this big agricultural business, but we'll keep trying.

We can't afford to brush off lightly any new ideas for doing our job no matter how far-fetched they may seem. Maybe one of these days we'll have to provide our State statisticians with airplanes and cameras, or maybe if they get the wings on these new automobiles big enough that won't be necessary.

In time I guess we can get used to anything. Actually, that "chicken-coop" house did have some mighty pretty rooms. Still, I'd rather look out of it than at it, and I suppose from the inside of one of these "winged" cars things would look different too.



S. R. Newell
Chairman, Crop Reporting Board, AMS

TUNG OIL SUPPLIES ARE INCREASING

The tung crop—spared by frost for the first time in five seasons—will be the largest on record. Tung oil supplies in the 1958-59 marketing year, which began November 1, are expected to be 40 percent greater than last year. The increase reflects the sharp rise in domestic production along with larger CCC carryover stocks.

The 1958 tung nut crop is estimated at 134,500 tons, compared with 82,600 a year ago. Tung nut output in each of the major producing States—Alabama, Florida, Louisiana, and Mississippi—is up from last year. Tung orchards did not suffer from early spring freezes in 1958 as they have in recent years. If the oil yield per ton of nuts crushed is about 320 pounds, the same as last year, tung oil output in 1958-59 will total around 42 million pounds.

U. S. production of tung nuts, only 1,200 tons in 1939, reached a former peak of 132,000 in 1952. Oil production in these years rose from less than a million pounds to 43 million pounds. In 1953, output dropped slightly to 120,000 tons. Frost damaged the crops from 1954 through 1957, reducing the 1954 crop two-thirds, and virtually wiping out the 1955 crop. In 1956, output rose to 104,000 tons, but dropped to 83,000 in 1957.

Varying Production

Freeze damage has caused widely varying production. It will continue to do so until research develops later-blooming varieties.

In recent years, new plantings of tung trees have been mainly for replacement or better utilization of old plantings. Consequently, even with favorable weather production is not likely to increase over the 1958 crop level.

The average price received by farmers for 1958-crop tung nuts is expected to be \$54 a ton, \$1.50 above last year, but again at support. Support for 1958-crop nuts has been set at \$53.89 per ton (basis 18.5 percent oil content) equivalent to 65 percent of parity. The equivalent support price for tung oil is 21.0 cents per pound, 0.5

cent above the 1957 level. Purchase agreements and loans on tung oil are available through June 30. Loans mature October 31 or earlier on demand by CCC.

Tung oil carryover on November 1, 1958, was 37 million pounds, about 12 million above 1957. CCC had about 25.7 million pounds of the carryover compared with 15 million in 1957.

Imports

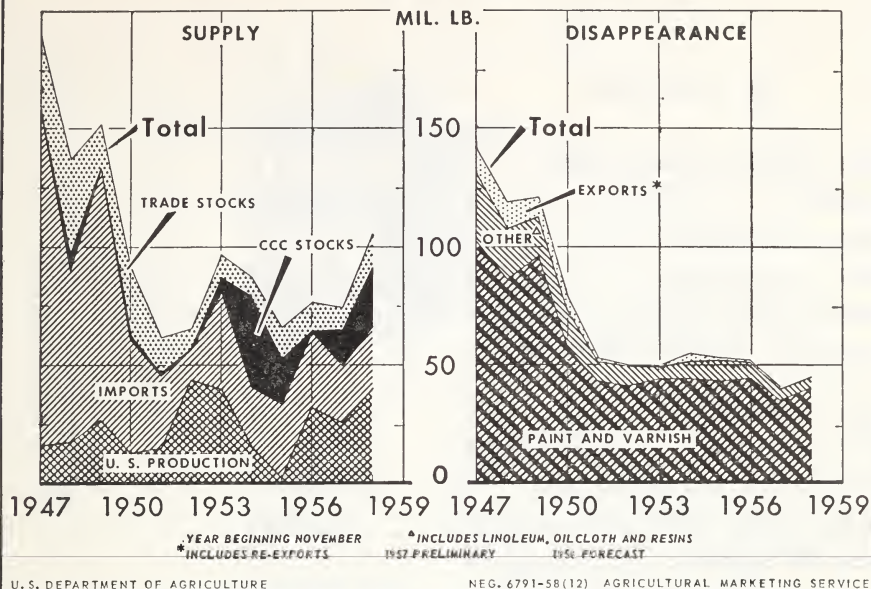
Imports of tung oil are restricted to 26 million pounds during the 1958-59 marketing year. Most of our imports of tung oil come from Argentina and Paraguay. This year the full quota will probably be imported because of heavy supplies in these countries. An embargo prevents imports from Red China, the major world producer.

If the forecast of 1958 production is substantially accurate and if the full quota is imported, total domestic supplies in 1958-59 would be around 105 million pounds, roughly 30 million more than in 1957-58. At the 1957-58 consumption level, this would be enough tung oil to meet domestic requirements for over 2 years.

Domestic use of tung oil in 1958-59 is forecast at 45-50 million pounds, up slightly from a year earlier. The demand for tung oil in the 1957-58 marketing year lagged along with the general decline in industrial activity. However, industrial production has advanced in recent months and a further rise is in prospect for the coming year. The demand for tung oil is expected to increase along with a general pickup in demand for drying oils from the protective-coating industry.

Domestic prices of tung oil at southern mills during the 1957-58 marketing year remained near the support level of 20.5 cents a pound. Prices for imported tung oil averaged slightly less than prices for domestic oil on the New York market and encouraged the consumption of foreign oil. The price of U. S. oil in New York is about 1¼ cents a pound above the support price at southern mills because of transportation costs.

TUNG OIL



Current prospects indicate tung oil prices to producers at southern mills in the 1958-59 marketing year will average near the support level of 21 cents a pound, which is a half cent above last year. Large carryover stocks, along with imports and the bumper 1958 crop, will keep prices from rising above the loan level during the marketing year.

So far this marketing year, imported tung oil prices have averaged below the support level equivalent of domestically produced oil. As a result, much of the current year's domestic production that is eligible for support will undoubtedly be placed under the program.

Rotation Program

A CCC rotation program has been placed in effect with the cooperation of the mills and the Marketing Cooperative. Commercial sales of domestic oil will be supplied out of 1956 and 1957 crop CCC held oil which will in turn be replaced by equivalent amounts of 1958 crop oil from the mills.

CCC is also currently offering tung oil for export sale on a competitive-bid

basis. CCC tung oil for export faces the competition of heavy world supplies and world prices, less than half those in the United States.

If U. S. consumption is at the 45-50-million-pound rate, and the import quotas are rapidly used up after February 1, 1959, more tung oil will tend to be placed under loan and then some domestic oil should be redeemed from CCC during the last few months of the marketing year. If the import quotas are filled more slowly, less will tend to be placed under loan. In any event, CCC presumably would acquire around 20 million additional pounds of tung oil.

Since 1950, domestic use of tung oil has been severely cut back and is now relatively stable at about 50 million pounds annually. Unstable supplies and prices have led industrial users to substitute other quick-drying oils, such as linseed and dehydrated castor oil. Synthetics also have been developed as drying agents and now supply an increasingly large share of the needs of the paint-and-varnish industry.

George W. Kromer
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Farmer's Share of Consumer's
Food Dollar

October 1957_-----	40 percent
September 1958_-----	40 percent
October 1958_-----	40 percent

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Articles In This Publication

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